

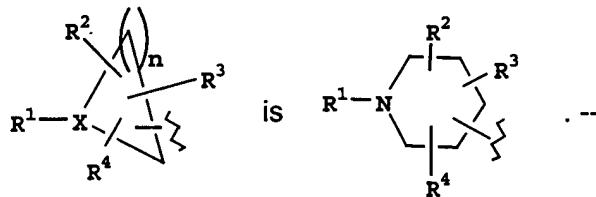
(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or

; tetrazolyl, pyrazolyl, pyridyl, thiazolyl, pyrimidinyl, imidazole, oxazole, or triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

or a pharmaceutically acceptable salt thereof, or a prodrug thereof, and all stereoisomers thereof. --

-- 76. The compound as defined in Claim 75 wherein



#### REMARKS

Claims 1 to 3, 6, 8 to 10, 14, 15, 17, 19, 20, 22, 24 to 31, and 63 to 74 as amended and new Claims 75 and 76 are present for purposes of prosecution.

Reconsideration of the rejection of this application is respectfully requested in view of the above amendments and the following remarks.

Applicants note with appreciation that Claims 28 to 30 and 63 are allowed and that Claims 6, 9, 10, 14, 25 to 27, 65, 67, 68, 72 and 74 are only objected to.

The above amendment are made to place this application in condition for allowance.

Amended Claim 1 now includes the allowed subject matter of Claim 6, that is in Claim 1, Z is defined as in objected to Claim 6.

New Claim 75 is the same as Claim 1 except that Claim 75 includes the allowed subject matter of Claim 9, that is in Claim 75 the R<sup>1</sup> heteroaryl group is substituted as defined in Claim 9.

Claim 2 has been made dependent on Claim 75.

Claim 22 has been amended to correct errors therein.

Claim 24 has been made dependent on Claim 1.

Claim 64 has been amended to include the allowed subject matter of Claim 6, that is in  
Claim 64, Z is defined as in objected to Claim 6.

Claim 73 has been amended to correct a formula therein.

Claim 76 has been made dependent on Claim 75.

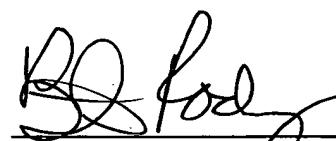
Claim 75 defines R<sup>1</sup> as being substituted with one to five substituents as defined in allowable  
Claim 9.

In addition, Claims 1 and 64 have been amended to delete the objected to term "including"  
in the last line thereof.

In view of the above amendments, the rejection of Claims 1 to 3, 8, 15, 17, 19, 22, 24, 31,  
64, 66, 70, 71 and 73 under 35 U.S.C. 102(b) as anticipated by Farina et al. is no longer applicable.  
All of the claims as now present either define Z as defined in objected to Claim 6 or define R<sup>1</sup> as  
defined in objected to Claim 9. The so-amended claims are clearly patentable over the Farina et al.  
reference which fails to disclose or suggest Applicants' compounds as now claimed.

In view of the foregoing, it is submitted that Claims 1 to 3, 6, 8, 14, 15, 17, 19, 20, 22, 24 to  
31 and 63 to 76 overcome all formal objections and defined patentable compounds and therefore  
are in condition of allowance.

Respectfully submitted,



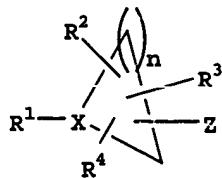
Burton Rodney  
Attorney for Applicants  
Reg. No. 22,076

Bristol-Myers Squibb Company  
Patent Department  
P.O. Box 4000  
Princeton, NJ 08543-4000  
(609) 252-4336

Date: *March 26, 2003*

MARKED-UP COPY TO SHOW CHANGES

-- 1. (Thrice Amended) A compound having the structure



wherein n is 4;

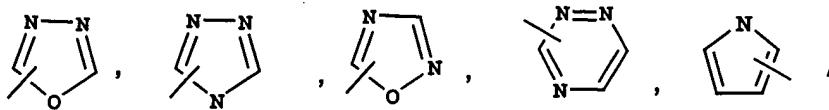
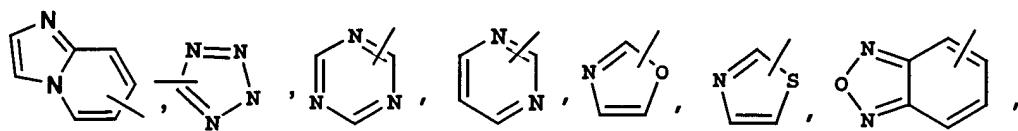
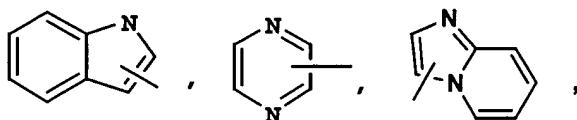
X is N;

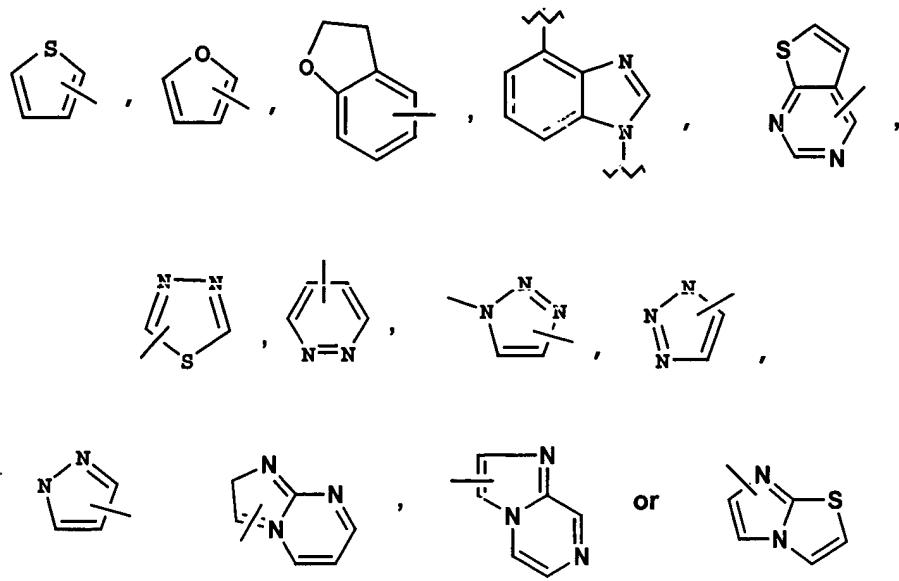
Z is a 5- or 6-membered nitrogen-containing monocyclic heteroaryl group which is selected from the group consisting of imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino-(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, [benzimidazole] aminothiazole, aminooxazole, aminooxadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole, alkoxy carbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine;

R<sup>1</sup> is heteroaryl,

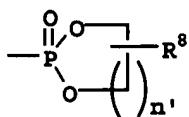
and R<sup>1</sup> may be unsubstituted or substituted with from one to five substituents;

and wherein the R<sup>1</sup> heteroaryl group is selected from

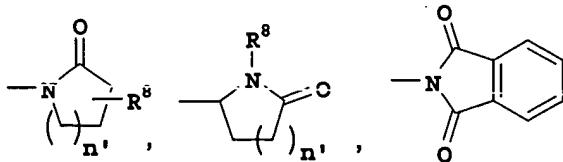




$R^2$ ,  $R^3$  and  $R^4$  are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylarnino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxy carbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxy carbonylamino, I,I-(alkoxyl or aryloxy)<sub>2</sub>alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,



pyridine-N-oxide,



(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or

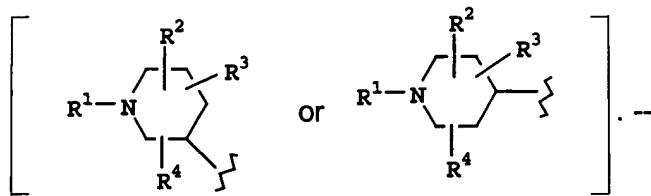
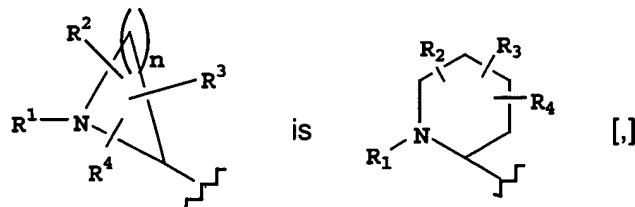
$\begin{array}{c} \text{NR}^8\text{R}^9 \\ | \\ -\text{C}=\text{CH}-\text{C}(=\text{O})-\text{R}^{8a} \end{array}$ ; tetrazolyl, pyrazolyl, pyridyl, thiazolyl, pyrimidinyl, imidazole, oxazole, or triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

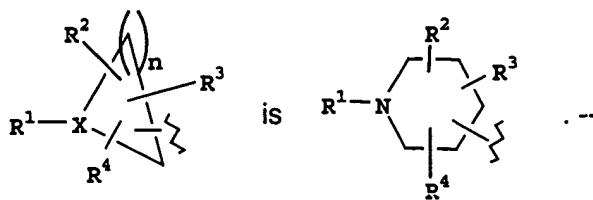
[including] or a pharmaceutically acceptable [salts] salt thereof, or a prodrug [prodrugs] thereof, and all stereoisomers thereof. --

-- 2. (Amended) The compound as defined in Claim [1] 75 wherein Z is a heteroaryl group containing 1 to 4 heteroatoms, at least one of which is a nitrogen atom, the heteroaryl group being attached to the rest of the molecule via an available nitrogen or carbon atom. --

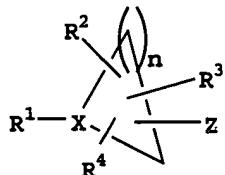
-- 22. (Twice Amended) The compound as defined in Claim 14 wherein



-- 24. (Twice Amended) The compound as defined in Claim [14] 1 wherein



-- 64. (Thrice Amended) A compound having the structure



wherein n is 4;

X is N;

Z is a 5- or 6-membered nitrogen-containing monocycle heteroaryl group which is selected from the group consisting of imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, [benzimidazole] aminothiazole, aminooxazole, aminooxadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole, alkoxy carbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine;

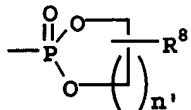


R<sup>1</sup> is tetrazolyl, pyrazolyl, thiazolyl, pyrimidinyl, oxazole, or triazole;

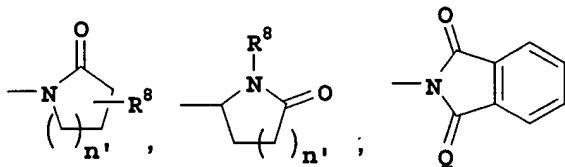
and R<sup>1</sup> may be unsubstituted or substituted with from one to five substituents;

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylamino carbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy,

arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylamino carbonylamino, alkoxy carbonylamino, alkenyloxycarbonylamino, alkynyoxy carbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxy carbonylamino, I,I-(alkoxyl or aryloxy)<sub>2</sub>alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,



pyridine-N-oxide,



(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or

; tetrazolyl, pyrazolyl, pyridyl, thiazolyl, pyrimidinyl, imidazole, oxazole, or triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

[including] or a pharmaceutically acceptable [salts] salt thereof, [prodrugs] or a prodrug thereof, and all stereoisomers thereof. --

-- 73. (Amended) The compound as defined in Claim 64 wherein

